

SAFETYNET Data Quality Tool v1.1

Instructions Guide

January 2021

Prepared for:
US Department of Transportation
Federal Motor Carrier Safety Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

Content

1	Introduction	2
2	Downloading the SAFETYNET Data Quality Tool.....	2
3	Uninstalling previous version of the SAFETYNET Data Quality Tool	3
4	Installing the SAFETYNET Data Quality Tool	3
4.1	Executing the Setup File.....	3
4	Running the SAFETYNET Data Quality Tool/Creating Reports	7
5	Sample Reports	11
5.1	New Inspections Report - Sample	12
5.2	All Inspections Report - Sample	14
5.3	New Crashes Report - Sample.....	16
5.4	All Crashes Report – Sample	22

1 Introduction

Federal Motor Carrier Safety Administration (FMCSA) State Partners upload crash and inspection records to the Motor Carrier Management Information System (MCMIS) through SAFETYNET, providing vital support to FMCSA's safety programs. Because accurate crash and inspection data are critical to the safety programs, FMCSA encourages State Partners to regularly check the quality of the data before uploading it to MCMIS.

To help State Partners improved data quality and achieve good State Safety Data Quality (SSDQ) ratings, FMCSA provides crash and inspection data quality reports at the SAFETYNET level. The reports help identify issues or compromised data in SAFETYNET before it is uploaded to MCMIS. This approach means that complete, accurate data is accessible by FMCSA when and where it's needed. This guidance document provides instructions to install and run the SAFETYNET Data Quality Tool. At the end of the document you will find sample reports and a description of how each section supports improvement of FMCSA SSDQ ratings.

2 Downloading the SAFETYNET Data Quality Tool

The SAFETYNET Data Quality Tool is available for download from the Infosys system.

1. Log in to the FMCSA Portal: <https://portal.fmcsa.dot.gov>.
2. Click on the Infosys link in the AVAILABLE FMCSA SYSTEMS section.
3. Once in Infosys, click on the Software tab, then on SAFETYNET.
4. Instructions document and download option are available:
 - a. The **SAFETYNET Data Quality Tool Download Instructions**. This document guides the user through the download and installation.
 - b. The **SNET_DQ_Tool_v11_Setup.exe** installation file. This is an installation wizard that will guide you through the installation.
5. If you are reading this, then you do not need to download the Instructions document, **SNET_DQ_Tool_v11 – Instructions.docx**, which is also found in Infosys-Software-SAFETYNET and in the A&I Help Center.
6. Select and download the installation file.

NOTE: Depending on the security settings in your system, you might require Administrator rights to perform the download and/or the installation.

3 Uninstalling previous version of the SAFETYNET Data Quality Tool

If you had previously installed a version of the SAFETYNET Data Tool, uninstall this first by going to the tool's folder (C:\DQTool by default). Locate and execute the uninst000.exe file and click Yes to remove the tool's files.

Name	Date modified	Type	Size
Reports	1/30/2021 11:42 AM	File folder	
SQL	1/30/2021 11:42 AM	File folder	
RUN_DQ_TOOL.bat	1/9/2021 10:17 PM	Windows Batch File	
unins000.dat	1/30/2021 11:42 AM	DAT File	
unins000.exe	1/30/2021 11:39 AM	Application	

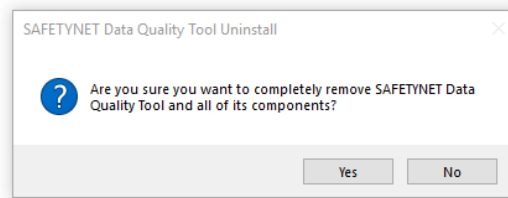


Figure 1. Uninstalling previous version

If you don't have the uninst000.exe file, then just delete the tool's folder (C:\DQTool by default) and its desktop shortcut.

4 Installing the SAFETYNET Data Quality Tool

States must perform this installation on the computer system that serves as the SAFETYNET Client. The SAFETYNET Client provides the necessary files and connectivity to the SAFETYNET database that are needed to run the SAFETYNET Data Quality Tool.

4.1 Executing the Setup File

1. Once downloaded, double click on the SNET_DQ_Tool_v11_Setup.exe file. If a Windows security or control prompt windows appears, click "Yes." The installation wizard will begin the installation process.
2. On the **License Agreement** window, select the "*I accept the agreement*" option, and click "Next."

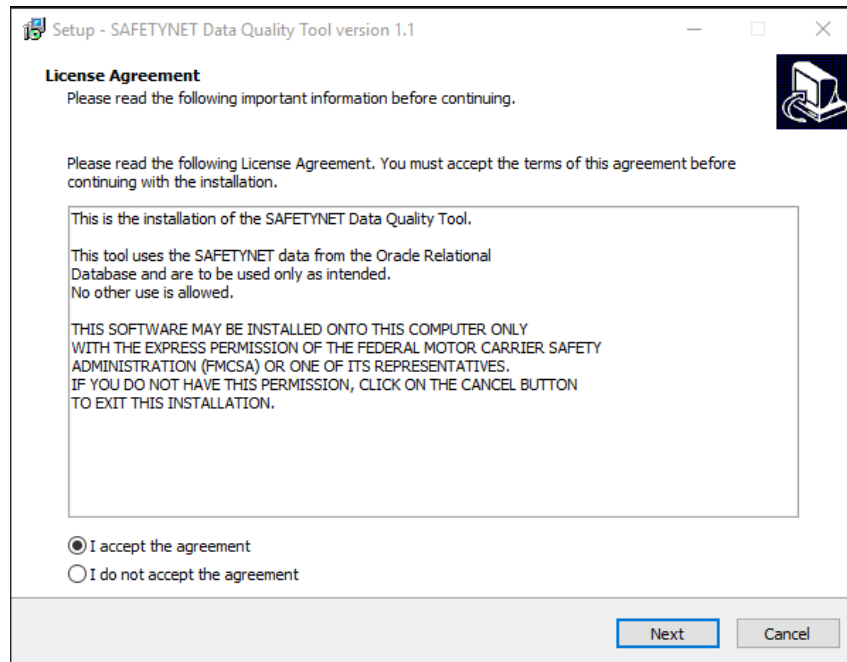


Figure 2. License Agreement

3. This installation is password-protected, enter ***dqtool2021*** in the password field and click “Next”.

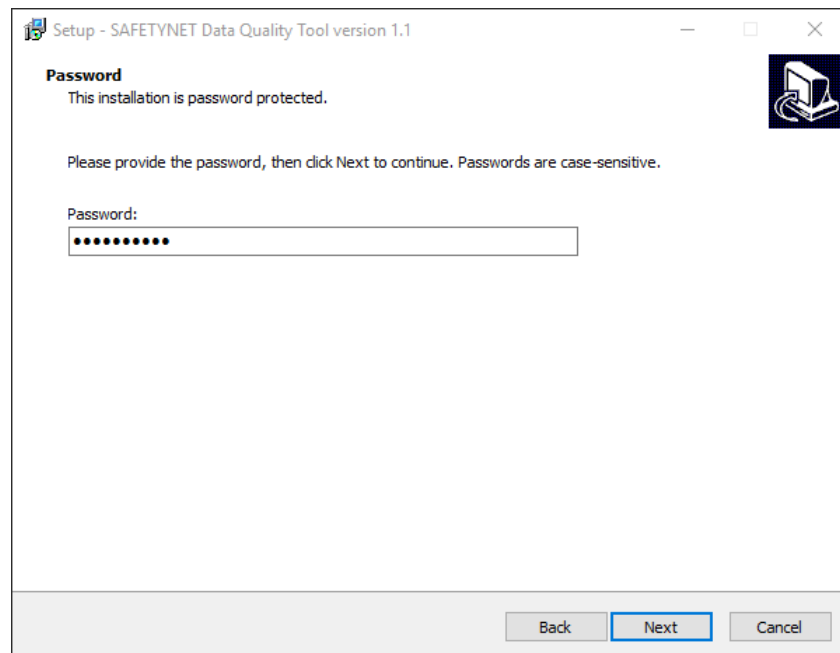


Figure 3. Password

4. By default, the installation folder is `C:\DQ_Tool`, click “Browse” to select a different location (the `DQ_Tool` folder will be created in the selected location), or click “Next.”
 - a. Make sure that the selected folder is not set to “Read-Only.” To check, right-click the folder, then select “Properties.” If the “Read-Only” checkbox is checked, uncheck it.

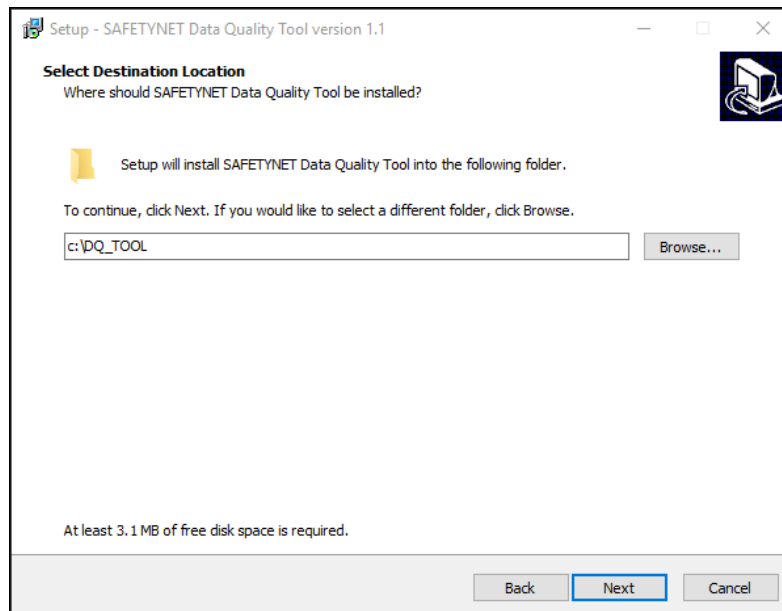


Figure 4. Select Destination Location

5. In the **Select Additional Tasks** window, check the “*Create a desktop icon*” checkbox. This will create a shortcut on the Desktop for easy access to the tool. Click “Next.”

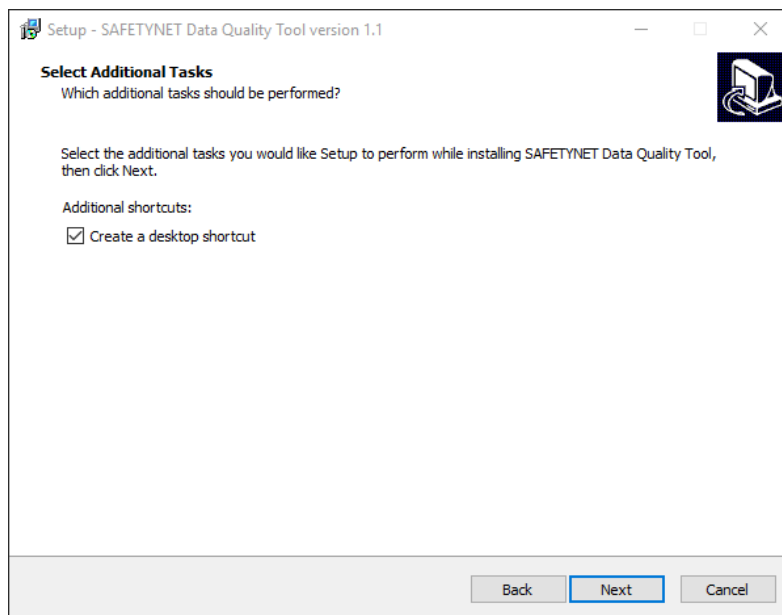


Figure 5. Select Additional Tasks

6. On the **Ready to Install** window, click “Install.”

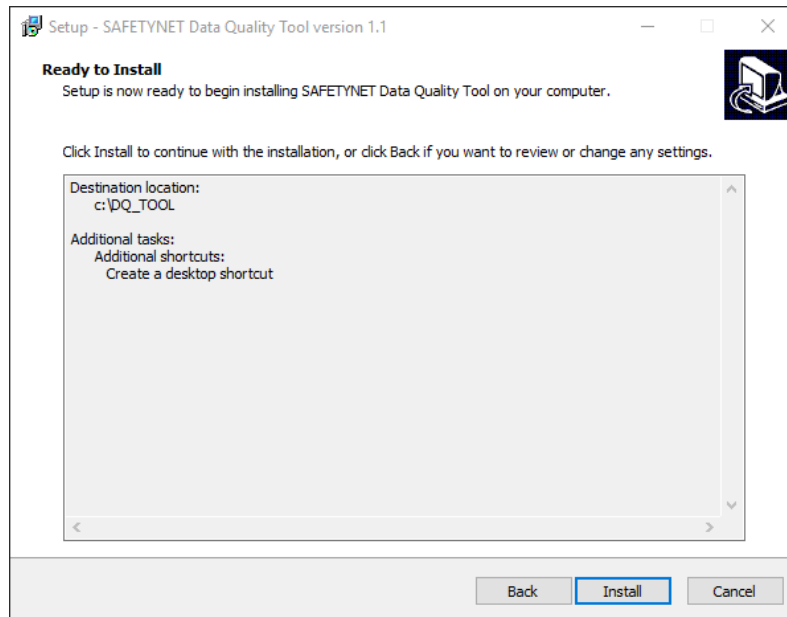


Figure 6. Ready to Install

7. After a quick progress bar, the **Completing the SAFETYNET Data Quality Reports Setup Wizard** window appears. Click “Finish” to end the process. If the “*Launch SAFETYNET Data Quality Reports*” checkbox is checked, the SAFETYNET Data Quality Tool will run at this point. Continue to section 4, *Running the SAFETYNET Data Quality Tool/Creating Reports, Step 2*.

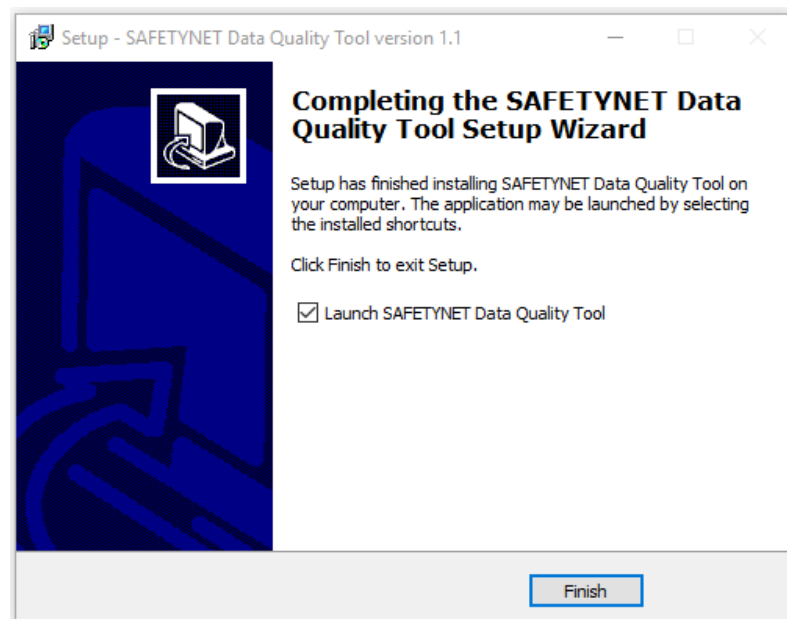


Figure 7. Completing the SAFETYNET Data Quality Reports Setup Wizard

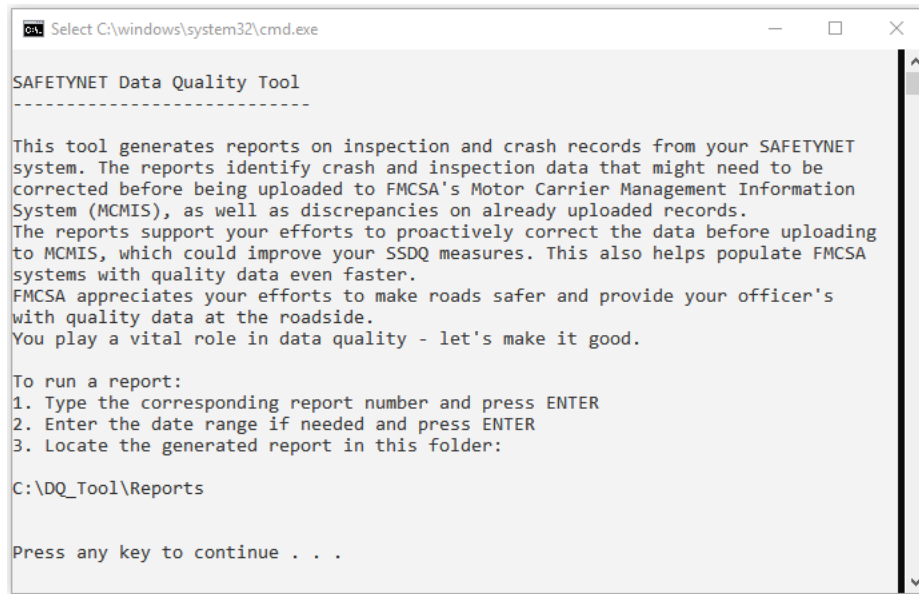


Figure 8. DQ_Tool Introduction

4 Running the SAFETYNET Data Quality Tool/Creating Reports

1. To run the tool, double-click on the Desktop's shortcut to SAFETYNET Data Quality Tool, or locate the installation folder (C:\DQ_Tool by default) and double-click on the actual file, RUN_DQ_TOOL.bat. The output reports will be in HTML format, and they will be placed in the Reports folder.

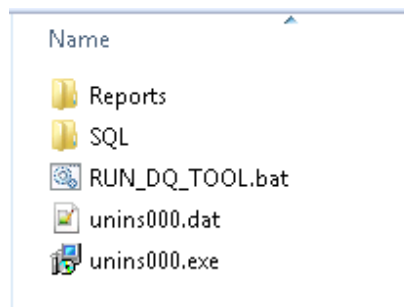


Figure 9. List of Files in DQ_Tool Folder

2. A command prompt window will open and provide an introduction. Press any key to continue.

```

Select C:\windows\system32\cmd.exe

SAFETYNET Data Quality Tool
-----

This tool generates reports on inspection and crash records from your SAFETYNET
system. The reports identify crash and inspection data that might need to be
corrected before being uploaded to FMCSA's Motor Carrier Management Information
System (MCMIS), as well as discrepancies on already uploaded records.
The reports support your efforts to proactively correct the data before uploading
to MCMIS, which could improve your SSDQ measures. This also helps populate FMCSA
systems with quality data even faster.
FMCSA appreciates your efforts to make roads safer and provide your officer's
with quality data at the roadside.
You play a vital role in data quality - let's make it good.

To run a report:
1. Type the corresponding report number and press ENTER
2. Enter the date range if needed and press ENTER
3. Locate the generated report in this folder:

C:\DQ_Tool\Reports

Press any key to continue . . .
  
```

Figure 10. DQ_Tool Introduction

3. The reports menu appears. This menu has three sections, INSPECTION Reports, CRASH Reports, and EXIT.

```

Select C:\windows\system32\cmd.exe

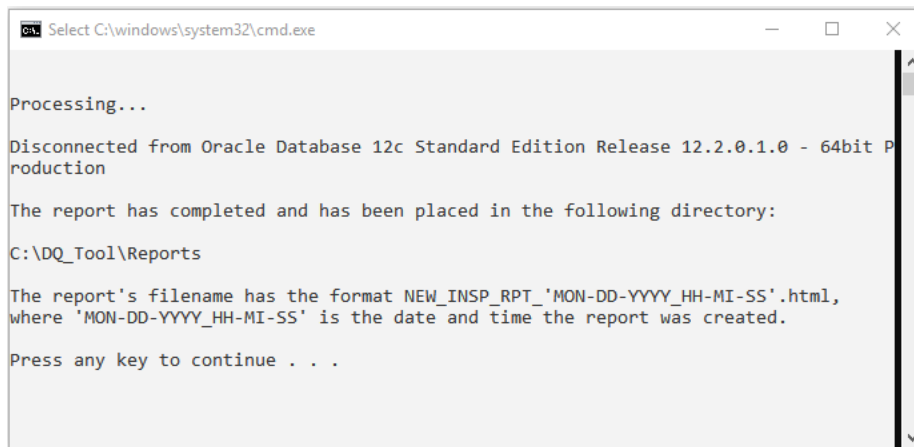
*****
**                                     **
**               SAFETYNET DATA QUALITY TOOL               **
**                                     **
*****
**
**  INSPECTION Reports  **
**          1 - New Inspection records          **
**          2 - All Inspection records          **
**
**  CRASH Reports      **
**          3 - New Crash records              **
**          4 - All Crash records              **
**
**  EXIT               **
**          x - Enter x when done              **
**
*****

Type 1, 2, 3, 4 to run a report, or type x to exit, then press ENTER:
  
```

Figure 11. DQ_Tool Reports Menu

a. INSPECTION Reports

- i. Type 1 and press Enter to run the **New Inspection records** report
 1. This reports targets only inspection records that HAVE NOT been uploaded to MCMIS yet. Ideally, this report should be created before records are uploaded to MCMIS to ensure optimal data quality.
 2. On the screen you will see that a connection to the SAFETYNET is made, the reports creation process runs for a couple of minutes, and then the following screen appears indicating the location of the report created and the format of the report name. Press any key to return to the reports menu.



```

Select C:\windows\system32\cmd.exe

Processing...

Disconnected from Oracle Database 12c Standard Edition Release 12.2.0.1.0 - 64bit P
roduction

The report has completed and has been placed in the following directory:

C:\DQ_Tool\Reports

The report's filename has the format NEW_INSP_RPT_\'MON-DD-YYYY_HH-MI-SS\'.html,
where \'MON-DD-YYYY_HH-MI-SS\' is the date and time the report was created.

Press any key to continue . . .

```

Figure 12. Created report location

- ii. Type 2 and press Enter to run the **All Inspection records** report
 1. This report targets inspection records that HAVE been uploaded to MCMIS as well as new records, and that fall within the inspection date range specified by the user. This report should be created when all records need to be reviewed to ensure data quality is at its best.
 2. On the screen you will see that a connection to the SAFETYNET database is made, you will be prompted for two dates. This is where you specify the inspection date range. The report creation process will run for a couple of minutes, and then the report location and report name format will be displayed. Press any key to return to the reports menu.

```

Select C:\windows\system32\cmd.exe

Enter the beginning Inspection date (Example 1/1/2020): 10/1/2020
Enter the ending Inspection date (Example 12/31/2020): 12/31/2020
Processing...
Disconnected from Oracle Database 12c Standard Edition Release 12.2.0.1.0 - 64bit Production
The report has completed and has been placed in the following directory:
C:\DQ_Tool\Reports
The report's filename has the format ALL_INSP_RPT_'MON-DD-YYYY_HH-MI-SS'.html,
where 'MON-DD-YYYY_HH-MI-SS' is the date and time the report was created.
Press any key to continue . . .
  
```

Figure 13. Inspection date range and report location

b. CRASH Reports

i. Type 3 and press Enter to run the **New Crash records** report

1. This reports targets only crash records that HAVE NOT been uploaded to MCMIS yet. Ideally, this report should be created before records are uploaded to MCMIS to ensure optimal data quality.
2. On the screen you will see that a connection to the SAFETYNET is made, the reports creation process runs for a couple of minutes, and then the following screen appears indicating the location of the report created and the format of the report name. Press any key to return to the reports menu.

```

Select C:\windows\system32\cmd.exe

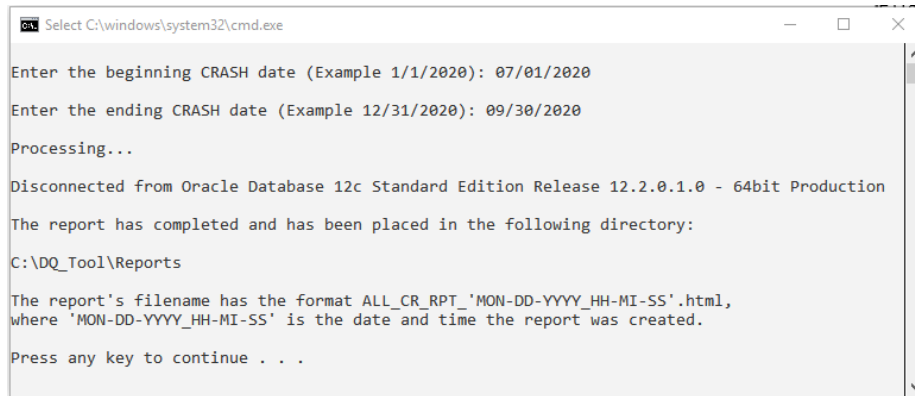
Processing...
Disconnected from Oracle Database 12c Standard Edition Release 12.2.0.1.0 - 64bit Production
The report has completed and has been placed in the following directory:
C:\DQ_Tool\Reports
The report's filename has the format NEW_CR_RPT_'MON-DD-YYYY_HH-MI-SS'.html,
where 'MON-DD-YYYY_HH-MI-SS' is the date and time the report was created.
Press any key to continue . . .
  
```

Figure 14. Created report location

ii. Type 2 and press Enter to run the **All Crash records** report

1. This report targets crash records that HAVE been uploaded to MCMIS as well as new records, and that fall within the crash date range specified by the user. This report should be created when older records need to be reviewed to ensure data quality is at its best.
2. On the screen you will see that a connection to the SAFETYNET database is made, you will be prompted for two dates. This is where you specify

the crash date range. The report creation process will run for a couple of minutes, and then the report location and report name format will be displayed. Press any key to return to the reports menu.



```
Select C:\windows\system32\cmd.exe

Enter the beginning CRASH date (Example 1/1/2020): 07/01/2020
Enter the ending CRASH date (Example 12/31/2020): 09/30/2020
Processing...
Disconnected from Oracle Database 12c Standard Edition Release 12.2.0.1.0 - 64bit Production
The report has completed and has been placed in the following directory:
C:\DQ_Tool\Reports
The report's filename has the format ALL_CR_RPT_\'MON-DD-YYYY_HH-MI-SS\'.html,
where \'MON-DD-YYYY_HH-MI-SS\' is the date and time the report was created.
Press any key to continue . . .
```

Figure 15. Crash date range and report location

- c. EXIT
 - i. Type x and press Enter to exit the tool.

5 Sample Reports

The following sample crash and inspection reports show the output and describe how each section supports improvement of the FMCSA SSDQ ratings. The records are part of a fictitious database.

5.1 New Inspections Report - Sample

SAFETYNET
DATA - QUALITY - REPORT
NEW - INSPECTION - RECORDS

This report presents findings from analysis performed on your State's SAFETYNET Inspection data. It is meant to be used as tool to identify records that might have compromised data. You can correct the data before upload to the Motor Carrier Management Information System (MCMIS).

This report presents results in a table format for the following sections:

-INSPECTION TIMELINESS
-INSPECTION DRIVER COMPLETENESS
-INSPECTION VEHICLE COMPLETENESS
-INSPECTION VIN ACCURACY

The targeted records are new Inspection records that have been recently imported or manually entered into SAFETYNET. These records have not been uploaded to MCMIS yet.

INSPECTION TIMELINESS

=====

Records 21 days old and under

This table displays counts of new inspections records that upon import to SAFETYNET, were still within 21 days of the inspection date. These records have not been uploaded to MCMIS. Any processing delays may result in the records being uploaded late to MCMIS. This is especially true for those records on the cusp of the 21 days (15 < DAYS <= 21).

DAYS <= 15	15 < DAYS <= 21	TOTAL 21 DAYS OLD AND UNDER
167	0	167

Records over 21 days old

This table displays counts of new inspections records that were over 21 days old upon import to SAFETYNET. These records have not been uploaded to MCMIS yet.

21 < DAYS <= 30	30 < DAYS <= 100	DAYS > 100	TOTAL OVER 21 DAYS OLD
0	0	8	8

Records over 21 days old by inspector Code

This table displays the count of new inspection records that were over 21 days old upon import to SAFETYNET. These records have not been uploaded to MCMIS. The Inspector Codes may help target inspectors for training in the FMCSA's 21-day timeliness requirement.

INSPECTOR CODE	INSPECTOR NAME	NUMBER OF RECORDS	DAYS LATE
UK2004	TRP. MATTHEW W. GLENN	1	165
UK5399	DEREK KINSEY	2	165
UK6567	NICK MARSHALL	1	165

SAFETYNET Data Quality Tool

INSPECTION DRIVER COMPLETENESS

=====

This table displays driver and co-driver data from inspections levels 1, 2, 3. Any record with a blank or invalid entry is listed below. The following criteria were used:

- FIRST and LAST NAME: initials only, numbers, non-alphanumeric characters, words like 'UNKNOWN', 'PARKED', etc.
- DATE OF BIRTH: age should be between 16 and 90 years-old
- LICENSE NUMBER: three characters or less, non-alphanumeric characters, words like 'UNREADABLE', 'LICENSE', etc.

REPORT NUMBER	INSPECTION DATE	INSPECTION TIME	DRIVER/ CO-DRIVER	DRIVER FIRST NAME	DRIVER LAST NAME	DRIVER DATE OF BIRTH	DRIVER LICENSE NUMBER
UK0000577448	01-FEB-21	11:00	Driver	MAGGIE	KOLE	15-AUG-71	NOLIC
UKLAAP000482	26-FEB-21	04:26	Driver	KEVIN	KOLE	25-NOV-69	L95450308CDLA
UKLAFM001435	16-FEB-21	10:30	Driver	MAGGIE	ROGERS	14-MAR-63	007200451ACDL
UKLAGG003658	07-FEB-21	10:10	Driver	UNK	UNK	09-JAN-72	UNK
UKLAIW000017	05-FEB-21	12:19	Driver	BOB	WEST	28-DEC-29	900076164

INSPECTION VEHICLE COMPLETENESS

=====

This table displays new inspection records with blank or invalid vehicle fields. The following criteria were used:

- LICENSE NUMBER: three characters or less, non-alphanumeric characters, words like 'UNREADABLE', 'LICENSE', etc.
- GVWR: values between 0 and 1000. Note: These values are not invalid according to the current State Safety

Data Quality (SSDQ) measure, however future enhancements to the measure may consider them invalid.

REPORT NUMBER	INSPECTION DATE	INSPECTION TIME	UNIT NUMBER	VEHICLE LICENSE NUMBER	GVWR
UK0000577281	23-FEB-21	18:10	1	P464321	
UK0000577672	13-FEB-21	09:55	1	UNKNOWN	48000
UKLABF009670	07-FEB-21	12:00	2	2961BH	0
UKLACJ005721	20-FEB-21	15:32	2	NONE	65000

INSPECTION VIN ACCURACY

=====

This table displays inspection records with blank or invalid VIN from Unit 1 from all inspection levels.

Invalid VIN entries include:

- Less than 17 characters in length
- Does not pass the checksum test
- Has invalid characters ('I', 'O', 'Q')
- Made up of the same digits ('3333333333333333')

REPORT NUMBER	INSPECTION DATE	INSPECTION TIME	VIN
UK0000577056	10-FEB-21	16:01	NO VIN
UK0000664643	25-FEB-21	16:05	1XWDR9 X6YJ81 132
UK0000697340	13-FEB-21	11:20	1HTGLA T1X

SAFETYNET Data Quality Tool

5.2 All Inspections Report - Sample

SAFETYNET

DATA - QUALITY - REPORT

ALL - INSPECTION - RECORDS

This report presents findings from analysis performed on your State's SAFETYNET Inspection data. It is meant to be used as tool to identify records that might have compromised data. You can correct the data before upload to the Motor Carrier Management Information System (MCMIS).

This report presents results in a table format for the following sections:

.....INSPECTION DRIVER COMPLETENESS

.....INSPECTION VEHICLE COMPLETENESS

.....INSPECTION VIN ACCURACY

The targeted records have been uploaded to MCMIS and are based on the INSPECTION record date range supplied by the user.

Inspection record date range specified: from '01-JAN-2020' to '31-MAR-2020'.

INSPECTION DRIVER COMPLETENESS

=====

This table displays driver and co-driver data from inspections levels 1, 2, 3. Any record with a blank or invalid entry is listed below. The following criteria were used:

- FIRST and LAST NAME: initials only, numbers, non-alphanumeric characters, words like 'UNKNOWN', 'PARKED', etc.
- DATE OF BIRTH: age should be between 16 and 90 years-old
- LICENSE NUMBER: three characters or less, non-alphanumeric characters, words like 'UNREADABLE', 'LICENSE', etc.
- LICENSE NUMBER: non-alphanumeric characters ('?', '#', etc.) or words like 'NONE', 'NODL', etc.

REPORT NUMBER	INSPECTION DATE	INSPECTION TIME	DRIVER/ CO-DRIVER	DRIVER FIRST NAME	DRIVER LAST NAME	DRIVER DATE OF BIRTH	DRIVER LICENSE NUMBER
UKLAAO003993	31-JAN-20	13:11	Driver	KEVIN	MADSEN	12-APR-77	6276825CDLB
UKLAAO004037	15-FEB-20	13:31	Driver	KEVIN	KOLE	27-JAN-80	6979271CDLA
UKLAAS001356	23-MAR-20	04:50	Co-driver	NICK	MADISON		
UKLABK005028	13-FEB-20	06:37	Driver	BOB	ROGERS	07-JUL-46	N/A
UKLAFA001486	15-MAR-20	17:06	Driver	MAGGIE	GRAHAM	02-MAY-56	3964768ACDL
UKLAFA001739	17-FEB-20	02:37	Driver	DAVE	COOPER	01-APR-45	05451021 ACDL
UKLAFJ000882	04-FEB-20	14:00	Driver	BOB	KOLE	18-JUN-70	005444578(A)CDL
UKLAFM001211	06-FEB-20	16:54	Driver	GEORGE	WEST	22-OCT-47	001740069ACDL
UKLAZZ002508	31-JAN-20	08:50	Driver	VICTORIA	WEST	16-MAR-55	12824714(A)
UKLAZZ003094	06-JAN-20	05:00	Driver	KEVIN	TRAVIS	22-NOV-53	3110270 (A)

SAFETYNET Data Quality Tool

INSPECTION VEHICLE COMPLETENESS

=====

This table displays all uploaded inspection records with blank or invalid vehicle fields.

The following criteria were used:

- LICENSE NUMBER: three characters or less, non-alphanumeric characters, words like 'UNREADABLE', 'LICENSE', etc.
- GVWR: values between 0 and 1000. Note: These values are not invalid according to the current State Safety

Data Quality (SSDQ) measure, however future enhancements to the measure may consider them invalid.

REPORT NUMBER	INSPECTION DATE	INSPECTION TIME	UNIT NUMBER	VEHICLE LICENSE NUMBER	GVWR
UK0000722429	01-FEB-20	20:50	1	T27595W	1
UKLAAQ001266	29-JAN-20	06:25	1	NONE	52000
UKLAAU001200	07-JAN-20	09:30	1	NONE	50000
UKLACJ005711	14-MAR-20	07:20	2	029391	0
UKLLACU001430	08-MAR-20	08:55	2	NONE	65000
UKLLADG001163	31-JAN-20	12:35	2	NONE	65000
UKLLAOU000035	01-MAR-20	10:40	2	L017811	0
UKLLAOU000078	28-MAR-20	14:31	2	E195306	0

INSPECTION VIN ACCURACY

=====

This table displays inspection records with blank or invalid VIN from Unit 1 from all inspection levels.

Invalid VIN entries include:

- Less than 17 characters in length
- Does not pass the checksum test
- Has invalid characters ('I', 'O', 'Q')
- Made up of the same digits ('3333333333333333')

REPORT NUMBER	INSPECTION DATE	INSPECTION TIME	VIN
UKL0000577467	18-JAN-20	10:00	1XP5D8 9X1XD4 65782
UKL0000577530	19-JAN-20	17:30	169451 5
UKL0000577577	24-FEB-20	10:45	R685SJ 69953
UKL0000577583	12-MAR-20	09:01	1FUPDS YB85P7 31377
UKL0000577587	04-FEB-20	08:05	1XP5DB 9X8JW2 53916
UKL0000577617	18-JAN-20	08:45	2FUPXY B2HV31 6323
UKL0000577628	04-FEB-20	10:40	SHSFHA EROXCO 764
UKL0000577753	25-JAN-20	10:50	1M1AA1 2Y45W0 46232
UKL0000577784	06-MAR-20	11:01	1XP5DB 9X8VD4 33524
UKL0000577798	07-MAR-20	12:10	1XKWB4 9X03J3
UKL0000578243	08-FEB-20	14:45	1GBJ6H 1C81J5 3412

SAFETYNET Data Quality Tool

5.3 New Crashes Report - Sample

SAFETYNET

DATA - QUALITY - REPORT

NEW - CRASH - RECORDS

This report presents findings from analysis performed on your State's SAFETYNET Crash data.

It is meant to be used as tool to identify records that might have compromised data. You can correct the data before upload to the Motor Carrier Management Information System (MCMIS).

This report presents results in table format for the following sections:

-RECORD COUNTS - Non-Reportable records
-CRASH TIMELINESS
-CRASH DRIVER COMPLETENESS
-CRASH VEHICLE COMPLETENESS
-CRASH VIN ACCURACY
-CRASH ACCURACY
-POSSIBLE CRASH DUPLICATE RECORDS
-POSSIBLE WARNINGS/REJECTIONS

The targeted records are new Crash records that have been recently imported or manually entered into SAFETYNET.

These records have not been uploaded to MCMIS yet.

RECORD COUNTS - Non-Reportable records

=====

This table displays selected fields for potentially non-reportable crash records. If uploaded with the current information, MCMIS will reject these records. Please verify that they meet the FMCSA’s reporting criteria and modify the information, if necessary. The TO BE UPLOADED flag indicates whether the records will get selected for upload.

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	FATALITIES	INJURIES	TOWAWAY	FEDERALLY RECORDABLE	STATE REPORTABLE	TO BE UPLOADED
UK0012052528	06-JAN-21	07:40	1	0	0	N	N	Y	Y
UK0013069105	15-OCT-20	12:15	1	0	0	N	N	Y	Y

=====

CRASH TIMELINESS

=====

Records 90 days old and under

This table displays counts of new crash records that upon import to SAFETYNET, were still within 90 days of the crash date. These records have not been uploaded to MCMIS. Any processing delays may result in the records being uploaded late to MCMIS. This is especially true for those records on the cusp of the 90 days (80 < DAYS <= 90).

DAYS <= 80	80 < DAYS <= 90	TOTAL 90 DAYS OLD AND UNDER
80	9	89

=====

Records over 90 days old

This table displays counts of new crash records that were over 90 days old upon import to SAFETYNET.

These are records that have not been uploaded to MCMIS yet.

SAFETYNET Data Quality Tool

90 < DAYS <= 100	100 < DAYS <= 200	DAYS > 200	TOTAL OVER 90 DAYS OLD
5	11	0	16

Records over 90 days old by Agency/Badge

This table displays counts of new crash records that were over 90 days old upon import to SAFETYNET.

These records have not been uploaded to MCMIS. The agency and Badge Number fields may help target those officers for training in the FMCSA's 90-day timeliness requirement.

AGENCY	BADGE	NUMBER OF RECORDS	DAYS LATE
Berne City Police	4133	1	105
Clay County Sheriff		1	103
Gary City Police		1	118
Greenfield City Police	2027	1	99
Greentown Town Police	2745	1	112

CRASH DRIVER COMPLETENESS

=====

This table displays all crash records with blank and invalid driver fields.

The following criteria were used:

- FIRST and LAST NAME: initials only, numbers, non-alphanumeric characters, words like 'NONE', 'LEFT', etc.
- Records with these words in the LAST NAME fields are not considered invalid: 'Parked', 'Driverless', 'Attenuator',
- 'Unknown', 'Autonomous', 'Hit and Run' or 'Stolen'.
- DATE OF BIRTH: age should be between 14 and 90 years-old
- LICENSE NUMBER: three characters or less, non-alphanumeric characters, words like 'UNREADABLE', 'LICENSE', etc.
- DRIVER LICENSE CLASS: is blank or not equal to A, B, C, D or M

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	FIRST NAME	LAST NAME	DATE OF BIRTH	LICENSE NUMBER	LICENSE CLASS
UK0011161928	28-SEP-20	16:34	1	SAM	ALLEN	14-JAN-72		A
UK0012125380	04-NOV-20	15:30	1	SAM	THOMAS		8DB32191	C
UK0012175981	14-JAN-21	07:30	1	JULIO	ARGUETA		7AX67204	C
UK0013026021	18-DEC-20	18:40	1	SAM	THOMAS			A
UK0013031803	29-DEC-20	20:05	1	M	H	25-MAR-82	3L013137	
UK0013128432	10-DEC-20	12:50	1	SAM	THOMAS	09-FEB-62	NONE	B
UK0013149981	20-SEP-20	16:35	1	SAM	HILL	19-FEB-49	rh560902	
UK0013156835	10-OCT-20	09:41	1	JOE	WELLS		EH495726	B
UK0013166100	12-OCT-20	12:11	1	GEORGE	HILL			A
UK0014030022	05-NOV-20	19:20	1	BOB	ALLEN	22-JUL-68	8C034128	
UK0014049038	08-JAN-21	23:37	1	SAM	WELLS		6C029450	B

SAFETYNET Data Quality Tool

CRASH VEHICLE COMPLETENESS

=====

This table displays all crash records with blank and invalid vehicle fields.

The following criteria were used in the query:

- VEHICLE CONFIGURATION: is blank
- CARGO BODY TYPE: is blank
- GVWR: is blank
- LICENSE NUMBER: three characters or less, non-alphanumeric characters, words like 'UNREADABLE', 'LICENSE', etc)

Records where the LAST NAME field is equal to 'Hit and Run' are not considered invalid.

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	VEHICLE CONFIG	CARGO BODY TYPE	GVWR	LICENSE PLATE NUMBER
UK0012067969	14-OCT-20	09:30	1	4	2		10494-BB
UK0013013062	10-JAN-21	07:25	1		5	2	199ED21
UK0013026021	18-DEC-20	18:40	1	4	2	3	Unknown
UK0013028727	20-NOV-20	13:05	1	7		2	C70189
UK0013101535	19-OCT-20	21:44	1		7	2	UNK
UK0013125032	27-OCT-20	02:42	1	3	1		GT4761
UK0013166100	12-OCT-20	12:11	1	99	5	2	
UK0014030022	05-NOV-20	19:20	1		99	2	B43935
UK0014065622	26-OCT-20	03:32	1	99	5	2	NONE-TEMP

CRASH VIN ACCURACY

=====

This table displays new crash records with blank or invalid VINs.

Invalid entries include:

- Less than 17 characters in length
- Does not pass the checksum test
- Has invalid characters ('I', 'O', 'Q')
- Made up of the same digits ('3333333333333333')

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	VIN
UK0011161928	28-SEP-20	16:34	1	UNKNOWN
UK0012005800	21-SEP-20	16:08	1	1GBG5V1G87E416625
UK0012143622	16-JAN-21	09:45	1	5PVNE8JROC4550175
UK0013026021	18-DEC-20	18:40	1	Unknown
UK0013032687	19-JAN-21	16:39	1	5FYH7FV128C03413
UK0013038669	26-SEP-20	22:15	1	Z975001108998
UK0013043722	17-OCT-20	12:10	1	F5YH7FV198C034127
UK0013068422	22-OCT-20	07:30	1	1FWBBCG85L437990
UK0013073930	26-NOV-20	14:02	1	2M93JM0A46W063586
UK0013083680	22-JAN-21	13:39	1	8106698R229C0F10
UK0013084966	02-DEC-20	15:58	1	1M2AG11C57M058
UK0013105661	08-JAN-21	03:10	1	YEZUF24BO92064875

SAFETYNET Data Quality Tool

CRASH ACCURACY

=====

This table displays new crash records that may have an incorrect carrier type. Many of the carrier non-matches that occur in MCMIS are due to records having the wrong carrier type. The following tables will help identify possible government entities, possible leased vehicles, and interstate/intrastate carriers with UNKNOWN values.

Correct the carrier type as needed.

Note: Research the carrier before changing the carrier type to ensure it is indeed NOT required to register with FMCSA.

Possible government vehicles

If the carrier name includes any of the following terms: CITY, TOWN, STATE, BOARD, DEPARTMENT, DEPT, COUNTY,

COMMONWEALTH, TOWNSHIP, FIRE, SCHOOL, TRANSIT, DOT, POSTAL, the record is flagged as a POSSIBLE GOVERNMENT entity.

If the carrier type is set to INTERSTATE/intrastate, the record could result in a non-match if the carrier is an actual government entity. In this case, the carrier type should be changed from INTERSTATE/Intrastate to

Not in Commerce/Government, thus, reducing the number of non-matches.

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	CARRIER TYPE	DOT NUMBER	CARRIER NAME
UK0011161928	28-SEP-20	16:34	1	INTERSTATE		AUSTIN FIRE DEPT
UK0013031803	29-DEC-20	20:05	1	INTERSTATE		Metro Transit
UK0013105661	08-JAN-21	03:10	1	INTERSTATE		METRO TRANSIT AUTHORITY
UK0013128432	10-DEC-20	12:50	1	INTERSTATE		First group/First transit Circu.
UK0013149785	20-JAN-21	10:04	1	INTERSTATE		DC Metro Transit

Possible rental/leased vehicles

If the carrier name includes any of the following terms: PENSKE, RYDER, HAUL, BUDGET, LEAS, RENT, the record is flagged as a POSSIBLE RENTAL/LEASED vehicle. In most cases, the DOT number uploaded does not belong to the carrier listed - which is usually the leasing company. If it is verified that the vehicle was in fact leased to another motor carrier, or that the vehicle has been leased to an INDIVIDUAL, the record should be updated.

In the latter case, the Carrier Type should be changed to Not in Commerce/Other Trucks, thus, reducing the number of non-matches.

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	CARRIER TYPE	DOT NUMBER	CARRIER NAME
UK0013000923	05-JAN-21	13:00	1	Not in Commerce-Government		PENSKE TRUCK LEASING CO. L.P.
UK0013038669	26-SEP-20	22:15	1	INTERSTATE		HERTZ EQUIPMENT RENTAL CORP
UK0014046509	21-JAN-21	09:00	1	INTERSTATE		INDIVIDUAL

SAFETYNET Data Quality Tool

Interstate and intrastate motor carriers with UNKNOWN information

If all the carrier fields are set to 'UNKNOWN', the carrier type should be changed to Other operation/Not Specified as this could be a hit and run crash. Also, if any of the carrier fields includes UNKNOWN values, consider updating the record as this will increase MCMIS opportunity to find a match for the carrier.

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ #	CARRIER TYPE	DOT NUMBER	CARRIER NAME	STREET	CITY	ST	ZIP CODE
UK0012027606	27-DEC-20	12:40	1	INTERSTATE		ANDY STIEYA	4628 BARTLETT RD	BEAMSVILLE	UK	99999
UK0012067435	24-DEC-20	08:50	1	INTERSTATE	00016130	PERFECT SETTINGS	UNKNOWN	UNKNOWN	UK	99999
UK0013048862	23-OCT-20	09:25	1	INTERSTATE		RB HINKLE CONSTRUCTION	UNKNOWN	UNKNOWN	UK	99999
UK0013049569	19-DEC-20	19:30	1	Intrastate		US Marines	UNKNOWN	UNKNOWN	DC	20003
UK0013083666	17-OCT-20	12:45	1	INTERSTATE	343613	UNKNOWN	511 67th Pl	Seat Pleseant	MD	20743

POSSIBLE CRASH DUPLICATE RECORDS

This table displays new crash records that had enough key information to be considered a duplicate record using driver, vehicle, and carrier data. Please review the records and make appropriate corrections.

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ #	DOT #	CARRIER NAME	FIRST NAME	LAST NAME	PLATE STATE	PLATE NUMBER	VIN
UK0012176626	01-APR-20	12:30	1	02954226	FORT MEYER CONSTRUCTION LLC	PAT	WELLS	MD	224ED93	1FDXE45P16HA59285
UK0012176626	19-OCT-20	13:20	1	02954226	FORT MEYER CONSTRUCTION LLC		WELLS	MD	224ED93	1FDXE45P16HA59285
UK0014072027	07-DEC-19	11:35	1	00548788	B F I ACCO RECYCLING SAN ANTONIO	SAM	HILL	DC	B47552	5FYC2LP121U023300
UK0014072027	19-JAN-21	11:36	1	00548788	B F I ACCO RECYCLING SAN ANTONIO	SAM	HILL	DC	B47552	5FYC2LP121U023300

POSSIBLE WARNINGS/REJECTIONS

This section includes records that have been imported and accepted by SAFETYNET; however, the records are not ready to be uploaded to MCMIS. Review each table below and correct the records as needed.

Blank carrier zip codes

This table displays new crash records with a blank zip code. MCMIS will reject these records if not corrected.

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	CARRIER TYPE	CARRIER NAME	CARRIER ZIP CODE
UK0013017935	25-JAN-21	15:12	1	INTERSTATE	C U Equipment Inc	
UK0013088367	06-DEC-20	16:07	1	INTERSTATE	W.M.A.T.A.	

SAFETYNET Data Quality Tool

Not-in-Commerce carriers with U.S. DOT numbers

This table displays crash records with a U.S. DOT number assigned to a non-motor carrier. MCMIS will reject these records if not corrected. Verify that the carrier is indeed a non-motor carrier.

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	CARRIER TYPE	DOT #	CARRIER NAME
UK0014029732	20-DEC-20	07:35	1	Other operation/not specified	00032700	KELLER TRANSPORTATION INC
UK0014036805	26-NOV-20	09:06	1	Not in Commerce-Government	38288	DCPS

Hazmat (HM) discrepancies

This table displays new crash records that contain HM information that appears inaccurate. Verify these records before upload.

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	HM PLACARD	HM 4-DIGIT #	HM NAME
UK0011171162	17-JAN-21	09:42	1	N/A	1903	
UK0013156835	10-OCT-20	09:41	1	N/A	0UNK	
UK0014072027	19-JAN-21	11:36	1	N/A	1090	

Records not meeting gross vehicle weight rating (GVWR) rules

This table displays new records that contain a vehicle with a GVWR = 1 or blank, and the vehicle is not a Bus or the vehicle is not transporting HM. This indicates that the GVWR does not have the correct value.

SAFETYNET will not upload these records until corrected.

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	GVWR	HM PLACARD	TRUCK
UK0012175981	14-JAN-21	07:30	1	1	N/A	Truck
UK0013125032	27-OCT-20	02:42	1		N/A	Truck
UK0014057224	09-NOV-20	10:02	1	1	N/A	Truck
UK0014072586	15-NOV-20	11:21	2	1	N/A	Truck

SAFETYNET Data Quality Tool

5.4 All Crashes Report – Sample

SAFETYNET

DATA - QUALITY - REPORT

ALL - CRASH - RECORDS

This report presents findings from analysis performed on your State's SAFETYNET Crash data. It is meant to be used as tool to identify records that might have compromised data. You can correct the data before upload to the Motor Carrier Management Information System (MCMIS).

This report presents results in table format for the following sections:

-RECORD COUNTS - Non-Reportable records
-CRASH DRIVER COMPLETENESS
-CRASH VEHICLE COMPLETENESS
-CRASH VIN ACCURACY
-CRASH ACCURACY
-POSSIBLE CRASH DUPLICATE RECORDS
-POSSIBLE WARNINGS/REJECTIONS

The targeted records are based on the Crash record date range supplied by the user. Crash record date range specified: from '01-JUL-2020' to '30-SEP-2020'.

RECORD COUNTS - Non-Reportable records

=====

This table displays selected fields for potentially non-reportable crash records. If uploaded with the current information, MCMIS will reject these records. Please verify that they meet the FMCSA’s reporting criteria and modify the information, if necessary.

The TO BE UPLOADED flag indicates whether the records will get selected for upload.

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	FATALITIES	INJURIES	TOWAWAY	FEDERALLY RECORDABLE	STATE REPORTABLE	TO BE UPLOADED
IN0011191077	04-SEP-20	17:25	1	0	0	N	N	Y	N

CRASH DRIVER COMPLETENESS

=====

This table displays all crash records with blank and invalid driver fields.

The following criteria were used:

- FIRST and LAST NAME: initials only, numbers, non-alphanumeric characters, words like 'NONE', 'LEFT', etc.
- Records with these words in the LAST NAME fields are not considered invalid: 'Parked', 'Driverless', 'Attenuator',
- 'Unknown', 'Autonomous', 'Hit and Run' or 'Stolen'.
- DATE OF BIRTH: age should be between 14 and 90 years-old
- LICENSE NUMBER: three characters or less, non-alphanumeric characters, words like 'UNREADABLE', 'LICENSE', etc.
- DRIVER LICENSE CLASS: is blank or not equal to A, B, C, D or M

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	FIRST NAME	LAST NAME	DATE OF BIRTH	LICENSE NUMBER	LICENSE CLASS
IN0011102917	12-AUG-20	18:40	1	MARY	WELLS	02-JUN-74	5F079067	
IN0011161928	28-SEP-20	16:34	1	SAM	ALLEN	14-JAN-72		A
IN0012158233	03-SEP-20	22:25	1	NICK		01-JAN-12	6HV94154	A

SAFETYNET Data Quality Tool

IN0013002951	24-SEP-20	08:09	1	JOE	WELLS	23-APR-17	8C034144	B
--------------	-----------	-------	---	-----	-------	-----------	----------	---

CRASH VEHICLE COMPLETENESS

=====

This table displays all crash records with blank and invalid vehicle fields.

The following criteria were used:

- VEHICLE CONFIGURATION: is blank
- CARGO BODY TYPE: is blank
- GVWR: is blank
- LICENSE NUMBER: three characters or less, non-alphanumeric characters, words like 'UNREADABLE', 'LICENSE', etc.

Records where the LAST NAME field is equal to 'Hit and Run' are not considered invalid.

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	VEHICLE CONFIG	CARGO BODY TYPE	GVWR	LICENSE PLATE NUMBER
IN0012100400	07-SEP-20	09:20	1	4	2		B40493
IN0012101140	26-SEP-20	16:34	1	4	2		UNK
IN0012117178	13-AUG-20	16:51	1	3	1	2	NOLIC
IN0013174150	10-JUL-20	12:51	1	4		2	H522522

CRASH VIN ACCURACY

=====

This table displays all crash records with blank or invalid VINs.

Invalid entries include the following criteria:

- Less than 17 characters in length
- Does not pass the checksum test
- Has invalid characters ('I', 'O', 'Q')
- Made up of the same digits ('3333333333333333')

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	VIN
IN0011161928	28-SEP-20	16:34	1	UNKNOWN
IN0011183250	13-SEP-20	06:34	1	1GCEC19X872155257
IN0012005800	21-SEP-20	16:08	1	NOVIN

CRASH ACCURACY

=====

This table displays all uploaded crash records that may have an incorrect carrier type. Many of the carrier non-matches that occur in MCMIS are due to records having the wrong carrier type. The following tables will help identify possible government entities, possible leased vehicles, and interstate/intrastate carriers with UNKNOWN values. Correct the carrier type as needed.

Possible government vehicles

If the carrier name includes any of the following terms: CITY, TOWN, STATE, BOARD, DEPARTMENT, DEPT, COUNTY, COMMONWEALTH, TOWNSHIP, FIRE, SCHOOL, TRANSIT, DOT, POSTAL, the record is flagged as a POSSIBLE GOVERNMENT entity.

If the carrier type is set to INTERSTATE/Intrastate, the record could result in a non-match if the carrier is an

SAFETYNET Data Quality Tool

actual government entity. In this case, the carrier type should be changed from INTERSTATE/intrastate to Not in Commerce/Government, thus, reducing the number of non-matches.

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	CARRIER TYPE	DOT NUMBER	CARRIER NAME
IN0011161928	28-SEP-20	16:34	1	INTERSTATE		AUSTIN FIRE DEPT
IN0013081513	19-AUG-20	12:45	1	Intrastate		OLD TOWN TROLLEY
IN0014042910	05-AUG-20	20:01	1	INTERSTATE	1002211	First Transit
IN0014053663	01-JUL-20	19:19	1	INTERSTATE		PAVING STATE WIDE

Possible rental/leased vehicles

If the carrier name includes any of the following terms: PENSKE, RYDER, HAUL, BUDGET, LEAS, RENT, the record is flagged as a POSSIBLE RENTAL/LEASED vehicle. In most cases, the DOT number uploaded does not belong to the carrier listed - which is usually the leasing company. If it is verified that the vehicle was in fact leased to another motor carrier, or that the vehicle has been leased to an INDIVIDUAL, the record should be updated. In the latter case, the Carrier Type should be changed to Not in Commerce/Other Trucks, thus, reducing the number of non-matches.

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	CARRIER TYPE	DOT NUMBER	CARRIER NAME
IN0011102917	12-AUG-20	18:40	1	Not in Commerce-Other trucks		INDIVIDUAL
IN0011179307	03-SEP-20	15:20	1	Not in Commerce-Other trucks		Penske
IN0011191077	04-SEP-20	17:25	1	INTERSTATE	00428371	U-HAUL COMPANY OF NORTH FLORIDA
IN0012021392	02-AUG-20	08:29	1	Not in Commerce-Other trucks		Budget Truck Rental
IN0013038572	03-SEP-20	18:28	1	INTERSTATE		HERTZ EQUIPMENT RENTAL CORP

Interstate and intrastate motor carriers with UNKNOWN information

If all the carrier fields are set to 'UNKNOWN', the carrier type should be changed to Other operation/Not Specified as this could be a hit and run crash. Also, if any of the carrier fields includes UNKNOWN values, consider updating the record as this will increase MCMIS opportunity to find a match for the carrier.

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	CARRIER TYPE	DOT NUMBER	CARRIER NAME	STREET	CITY	ST	ZIP CODE
IN0011168745	12-SEP-20	18:00	1	INTERSTATE	032700	keller transportation	UNKNOWN	UNKNOWN	UK	99999
IN0011191077	04-SEP-20	17:25	1	INTERSTATE	00428371	U-HAUL COMPANY OF NORTH FLORIDA	UNKNOWN	JACKSONVILLE	FL	32205
IN0013013632	07-JUL-20	09:00	1	Intrastate		UNKNOWN	600 5TH ST. NW	WASHINGTON	DC	20001
IN0013014453	04-SEP-20	21:30	1	INTERSTATE		WMATA - DC GOVERNMENT	UNKNOWN	UNKNOWN	UK	99999
IN0013025823	13-AUG-20	11:19	1	INTERSTATE		SUPER SHUTTLE	UNKNOWN	UNKNOWN	UK	99999
IN0014025969	26-AUG-20	08:08	1	INTERSTATE	00704683	UNLIMITED TRANSPORT OF MD INC	3025 DUNCROSS LN	DUNKIRK	MD	20754-2943

POSSIBLE CRASH DUPLICATE RECORDS

=====

This table displays all crash records that had enough key information to be considered a duplicate record using driver, vehicle, and carrier data. Please review the records and make appropriate corrections.

SAFETYNET Data Quality Tool

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	DOT #	CARRIER NAME	FIRST NAME	LAST NAME	PLATE STATE	PLATE NUMBER	VIN
UK0014016456	03-OCT-16	20:18	1		CLARKSTON AUTO BODY INC	JIM	JONES	MI	B46924	5FYH8FR13CC039274
UK0014016456	03-OCT-18	20:18	1		CLARKSTON AUTO BODY INC			MI	B46924	5FYH8FR13CC039274
UK0012170083	05-DEC-18	08:18	1	00226969	SYSKO EASTERN MARYLAND LLC	BOB	ALLEN	MD	B42884	1FUJGBDV7ASAT1541
UK0014064733	05-DEC-18	08:18	1	00226969	SYSKO EASTERN MARYLAND	BOB	ALLEN	MD	B42884	1FUJGBDV7ASAT1541
UK0011189785	29-DEC-18	09:03	1	00404782	KEANY PRODUCE COMPANY	DAVE	MILLER	MD	45P123	2FZACFDC85AN79126

POSSIBLE WARNINGS/REJECTIONS

This section includes records that have been imported and accepted by SAFETYNET; however, the records are not ready to be uploaded to MCMIS. Review each table below and correct the records as needed.

Blank carrier zip codes

This table displays crash records with a blank zip code. MCMIS will reject these records if not corrected.

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	CARRIER TYPE	CARRIER NAME	CARRIER ZIP CODE
UK0011164373	08-NOV-18	11:45	1	Not in Commerce-Other trucks	PENSKE TRUCK LEASING	
UK0011179158	07-DEC-18	09:10	1	Intrastate	ENTERPRISE LEASING COMPANY OF GA LLC	

Not-in-Commerce carriers with U.S. DOT numbers

This table displays crash records with a U.S. DOT number assigned to a non-motor carrier. MCMIS will reject these records if not corrected.

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	CARRIER TYPE	DOT #	CARRIER NAME
UK0011176679	02-DEC-18	15:23	1	Not in Commerce-Government	1542	Prince George's County Government
UK0012170083	05-DEC-18	08:18	1	Not in Commerce-Government	00226969	SYSKO EASTERN MARYLAND LLC

Hazmat (HM) discrepancies

This table displays crash records that contain HM information that appears inaccurate.

Verify these records before upload.

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	HM PLACARD	HM 4-DIGIT #	HM NAME
IN0012165823	13-AUG-20	12:25	1	N/A	1075	
IN0013037542	31-AUG-20	11:14	1	N/A	0UNK	
IN0013141891	27-SEP-20	07:40	1	N/A	NONE	

Records not meeting gross vehicle weight rating (GVWR) rules

This table displays records that contain a vehicle with a GVWR = 1 or blank, and the vehicle is not a Bus or the vehicle is not transporting HM. This indicates that the GVWR could not have the correct value.

SAFETYNET will not upload these records until corrected.

REPORT NUMBER	CRASH DATE	CRASH TIME	SEQ#	GVWR	HM PLACARD	TRUCK
IN0014065159	16-JUL-20	13:59	1		N/A	Truck
UK0012175981	17-DEC-18	07:30	1	1	N/A	Truck